

delivering a quantity of fresh fluid sufficient to substantially replace the used fluid within the transmission and the fluid circuit from the source container into the transmission and the fluid circuit within the vehicle as the used fluid is expelled from the transmission and the fluid circuit into the receptacle.

Please cancel claim 6.

Please add the following claims 19 – 50.

19. (new) A method for exchanging a used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit, said used fluid initially being contained within said transmission and within said fluid cooling circuit, at least a substantial portion of which is subsequently discharged into a receptacle, said fresh fluid initially being contained in a source container, said method comprising the steps of:

providing a fluid exchange system having a first conduit for communicating fluid from the transmission, a second conduit for communicating fluid to the transmission, and a bypass conduit for selectively communicating fluid between the first conduit to the second conduit;

uncoupling the fluid cooling circuit to provide a connection access to a high pressure side and a low pressure side of the fluid cooling circuit;

establishing a bypass condition by selectively coupling the bypass conduit to receive fluid from the high pressure side of the fluid cooling circuit and to conduct said fluid to the low pressure side of the fluid cooling circuit; and

establishing a fluid exchange condition by selectively uncoupling the bypass conduit and coupling the first conduit to the high pressure side and the second conduit to the low pressure side, whereby used fluid from the high pressure side is conducted into the first conduit and fresh fluid is conducted into the low pressure side from the second conduit.

20. (new) The method of claim 19, including the step of providing a fluid indicator in fluid communication with the bypass conduit.

21. (new) The method of claim 20, including the step of determining a direction of fluid flow within the fluid cooling circuit by the fluid indicator.

22. (new) The method of claim 20 wherein the fluid indicator is a pressure indicator.

23. (new) The method of claim 20 wherein the fluid indicator provides an electronic signal.

24. (new) A method for exchanging a used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit, with the used fluid circulated through the circuit under power of an internal pump within the transmission, said used fluid initially being contained within said transmission and said fluid cooling circuit, at least a substantial portion of which is subsequently discharged into a receptacle, said fresh fluid initially being contained in a source container, said method comprising the steps of:

providing a fluid exchange system having a first conduit for communicating fluid from the transmission, a second conduit for communicating fluid to the transmission, and a bypass conduit for selectively communicating fluid between the first conduit to the second conduit;

coupling the first and second conduits of the fluid exchange system into an accessed fluid cooling circuit;

establishing a bypass condition by selectively coupling said bypass conduit between the first and second conduits so that used fluid from the fluid cooling circuit is received into the first conduit and is passed through the bypass conduit and into the second conduit whereby used fluid is reintroduced into the accessed fluid cooling circuit; and

establishing a fluid exchange condition by selectively uncoupling the bypass conduit between the first and second conduits so that used fluid from the fluid cooling circuit is received into the first conduit and fresh fluid is received into the second conduit and introduced into the accessed fluid cooling circuit.

25. (new) The method of claim 24, further comprising the step of:

measuring a fluid parameter in the bypass conduit during the bypass condition.

26. (new) The method of claim 24, further comprising the step of:  
measuring a fluid parameter in the first and second conduits during the exchange condition.

27. (new) The method of claim 26, further comprising the step of:  
adjusting a fluid flow rate of at least the first conduit during the exchange condition to approximately match a fluid flow rate of the bypass conduit measured during the bypass condition.

28. (new) The method of claim 25 wherein the step of measuring the fluid parameter in the bypass conduit is accomplished with a pressure indicator.

29. (new) The method of claim 25 wherein the step of measuring the fluid parameter in the bypass conduit is accomplished with a fluid flow meter.

30. (new) The method of 29 wherein the fluid flow meter is electronic.

31. (new) The method of claim 26 wherein the step of measuring the fluid parameter in the first and second conduits is accomplished with a pressure indicator.

32. (new) The method of claim 26 wherein the step of measuring the fluid parameter in the first and second conduits is accomplished with a fluid flow meter.

33. (new) The method of claim 32 wherein the fluid flow meter is electronic.

34. (new) A method for exchanging a used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit, with the used fluid circulated through the circuit under power of an internal pump within the transmission, said used fluid initially being contained within said transmission and said fluid cooling circuit, at least a

substantial portion of which is subsequently discharged into a receptacle, said fresh fluid initially being contained in a source container, said method comprising the steps of:

providing a fluid exchange system having a first conduit for communicating fluid from the transmission, a second conduit for communicating fluid to the transmission, and a bypass conduit for selectively communicating fluid between the first conduit to the second conduit;

coupling the first and second conduits of the fluid exchange system into an accessed fluid cooling circuit;

establishing a bypass condition by selectively coupling said bypass conduit between the first and second conduits so that used fluid from the fluid cooling circuit is received into the first conduit and is passed through the bypass conduit and into the second conduit whereby used fluid is reintroduced into the accessed fluid cooling circuit;

measuring a fluid parameter in the bypass conduit during the bypass condition;

establishing a fluid exchange condition by selectively uncoupling the bypass conduit between the first and second conduits so that used fluid from the fluid cooling circuit is received into the first conduit and fresh fluid is received into the second conduit and introduced into the accessed fluid cooling circuit;

adjusting an exchange fluid parameter of the first conduit and the second conduit during the exchange condition to approximately match the fluid parameter measured during the bypass condition.

35. (new) The method of claim 34, wherein the step of measuring the fluid parameter in the bypass conduit includes reference to a pressure indicator in fluid communication with the bypass conduit.

36. (new) The method of claim 34, wherein the step of measuring the fluid parameter in the bypass conduit includes reference to a flow meter in fluid communication with the bypass conduit.

37. (new) The method of claim 36, wherein the fluid flow meter is electronically indicating.

38. (new) The method of claim 34, wherein the step of adjusting the exchange fluid parameter of the first conduit and the second conduit is achieved through a manipulation of a fluid valve in fluid communication with at least one of the first or second conduit.

39. (new) The method of claim 38, wherein the fluid valve is electrically operated.

40. (new) An exchange procedure for changing a used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit, with the used fluid circulated through the fluid cooling circuit under power of an internal pump within the transmission, said used fluid initially being contained within said transmission and said fluid cooling circuit, at least a substantial portion of which is subsequently discharged into a receptacle, said fresh fluid initially being contained in a source container, said method comprising the steps of:

providing a fluid exchange system having a plurality of conduits, including a first conduit for communicating fluid from the transmission, and a second conduit for communicating fluid to the transmission;

accessing the fluid cooling circuit of the transmission to provide a connection access to a high pressure side and a low pressure side;

coupling the first conduit to the high pressure side, and coupling the second conduit to the low pressure side of the fluid cooling circuit;

providing fluid communication between the first and second conduits;

flowing used fluid into the first conduit and through the second conduit so that used fluid from the fluid cooling circuit is recirculated back into the fluid cooling circuit;

measuring an approximate fluid flow rate in the cooling circuit by measuring a fluid flow rate in at least one of the fluid conduits of the fluid exchange system;

pumping fresh fluid at a selective fluid flow rate into the fluid cooling circuit through the second conduit while receiving used fluid from the fluid cooling circuit through the first conduit; and

equalizing the selective fluid flow rate to the approximate fluid flow rate in the cooling circuit as measured.

41. (new) An exchange procedure of claim 40, wherein the step of equalizing the selective fluid flow rate is achieved by operation of one or more fluid valves in fluid communication with at least one of the first or second conduits.

42. (new) An exchange procedure for changing a used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit, with the used fluid circulated through the circuit under power of an internal pump within the transmission, said used fluid initially being contained within said transmission and said fluid cooling circuit, at least a substantial portion of which is subsequently discharged into a receptacle, said fresh fluid initially being contained in a source container, said method comprising the steps of:

providing a fluid exchange system having a plurality of conduits, including a first conduit for communicating fluid from the transmission, and a second conduit for communicating fluid to the transmission;

accessing the fluid cooling circuit of the transmission by connecting the first and second conduits thereto;

pumping during an exchange condition fresh fluid through the second conduit at a selective fluid flow rate into the fluid cooling circuit while receiving used fluid from the fluid cooling circuit through the first conduit; and

selectively establishing a bypass condition after the exchange condition by selectively coupling the first conduit to the second conduit so that fluid from the fluid cooling circuit is received into the fluid exchange system and recirculated back into the fluid cooling circuit.

43. (new) The method of claim 42 wherein the step of pumping is achieved through operation of an internal pump of the transmission.

44. (new) The method of claim 42 wherein the step of pumping is achieved through operation of an externally-powered fluid pump.

45. (new) An exchange procedure for changing a used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit, with the used fluid circulated through the circuit under power of an internal pump within the transmission, said used fluid initially being contained within said transmission and said fluid cooling circuit, at least a substantial portion of which is subsequently discharged into a receptacle, said fresh fluid initially being contained in a source container, said method comprising the steps of:

providing a fluid exchange system having a plurality of conduits, including a first conduit for communicating fluid from the transmission, and a second conduit for communicating fluid to the transmission;

accessing the fluid cooling circuit of the transmission by connecting the first and second conduits thereto;

flowing fluid from the fluid cooling circuit through the first conduit and recirculating said fluid through the second conduit during a bypass condition;

pumping during an exchange condition fresh fluid through the second conduit at a selective fluid flow rate into the fluid cooling circuit while receiving used fluid from the fluid cooling circuit through the first conduit; and

selectively reestablishing the bypass condition after the exchange condition by selectively coupling the first conduit to the second conduit so that fluid from the fluid cooling circuit is received into the fluid exchange system and recirculated back into the fluid cooling circuit.

46. (new) An exchange procedure for changing a used fluid with a fresh fluid in a vehicle having an automatic transmission connected to a fluid cooling circuit, with the used fluid circulated through the circuit under power of an internal pump within the transmission, said used fluid initially being contained within said transmission and said fluid cooling circuit, at least a substantial portion of which is subsequently discharged into a receptacle, said fresh fluid initially being contained in a source container, said method comprising the steps of:

providing a fluid exchange system having a plurality of conduits, including a first conduit for communicating fresh fluid to the transmission, and a second conduit for communicating used fluid from the transmission;

accessing the fluid cooling circuit of the transmission by connecting the first and second conduits thereto;

providing a first fluid meter in fluid communication with the first conduit to measure a fluid flow parameter therein;

providing a second fluid meter in fluid communication with the second conduit to measure a fluid flow parameter therein;

pumping fresh fluid from the source container through the first conduit and into the fluid cooling circuit while receiving used fluid from the fluid cooling circuit through the second conduit;

measuring a fluid flow parameter in the first conduit through reference to the first fluid meter;

measuring a fluid flow parameter in the second conduit through reference to the second fluid meter;

providing at least one valve in fluid communication with either the first conduit or the second conduit to control a flow of fluid therethrough; and

adjusting said at least one valve so that the fluid flow parameter in the first conduit is substantially equalized to the fluid flow parameter in the second conduit.

47. (new) The method of claim 46 wherein the at least one valve comprises a pair of adjustable valves with one of the pair of adjustable valves being in fluid communication with the first conduit and the other of the pair of adjustable valves being in fluid communication with the second conduit.

48. (new) The method of claim 46 wherein the first and second fluid meters are pressure gauges.

49. (new) The method of claim 46 wherein the first and second fluid meters are flow meters.

50. (new) The method of claim 49 wherein the first and second fluid meters are electronic flow meters.